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Precision

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1956 National Bench Rest Champion, C. C. Hankins, Buffalo, Wyoming, Amidst Trophy and Merchandise Prizes He Won.

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THE SWEANY "OPTICAL PLUG"

The "OPTICAL PLUG" is not a plug at all, but is a very precise optical instrument for accurately gauging and scoring bullet holes in targets without disturbing or displacing the pattern of the bullet print on the paper. This is another valuable aid to shooting match and tournament statistical workers which has been designed and is made by John B. Sweany, 187-A Silverado Trail, Calistoga, California.

The "OPTICAL PLUG" is a rugged metal tube, 3½ inches long when fully closed and just over ½ inches outside diameter. The reticle end is of plain glass with the outside surface of the glass flush with the end of the metal tube. On the outside surface of this glass is scribed the reticle—a circle of outside diameter equal to the outside diameter of the bullet of the caliber to be scored. In use, the glass in this end of the tube is in contact with the target paper. Since the reticle is scribed on the surface of the glass which is in contact with the paper, there is no parallax.

In the opposite end of the tube is the optical lens of 4 power magnification. There is draw-tube adjustment of focus to fit the user's vision. One side of the tube, directly above the reticle lens, is cut away for approximately one third the diameter of the tube and one inch maximum length to provide for good lighting on that part of the target being examined.

To use, the reticle end of the "OP-TICAL PLUG" is placed in contact with the target paper over the bullet hole, with the target supported by the finger over the back of the bullet hole or with the target resting on a flat table or other surface. The print of the bullet hole is then centered in the reticle circle, and with the 4 power magnification blowing up the "break pattern" of the bullet print, this centering can be very accurately accomplished. The resulting scoring is the most precise and accurate of anything this writer has ever seen—and over the past twenty odd years he has scored several thousands of match and tournament targets with the various scoring gauges available during that period.

When the scoring is done on a table the first scorer may leave the "OPTI-CAL PLUG" in place, as he centered the bullet print in the reticle circle, and a checker may see the scoring exactly as the original scorer did. Since no paper is displaced, or the bullet print disturbed in any way, shots may be rechecked, accurately, innumerable times. In case of a challenge of a shot value, the competitor may view the scoring exactly as the scorer did.

Very close doublet shot-holes can be determined with amazing accuracy. I have a bench rest target, fired in a match, that is known to have one doublet shot on it (verified by the moving backer). There are three shot holes on that target which look as if they might be possible doublets and for more than 18 months I've been plumb curious as to just which one was the doublet. Examination of the target with the "OPTICAL PLUG" identified the doublet beyond a shadow of doubt. This feature alone could avoid headaches for pistol target scorers when those mythical doublets are claimed by optimistic and hopeful competitors.

"Close" shots which break into another bullet hole may be more accurately scored with the aid of the "OPTICAL PLUG" than with any other gauge this writer has ever used or seen.

The "OPTICAL PLUG" is versatile as well as accurate. For such a precise, though simple, optical instrument, its cost seems quite reasonable. Mr. Sweany advises that at present prices for glass he can supply the "OPTICAL PLUG" for \$8.00

PHT

TOURNAMENT SHOOTING "FOR FUN"

You may have heard the expression that one was willing to compete against others "for fun, money or marbles." I've heard that expression applied to shooting, as between individuals or very small groups, but it has not been the policy in formal shooting competitions—tournaments.

One who would compete in shooting matches has been, in most cases, compelled to compete for "money" or "marbles" (medals or trophies) inasmuch as one was compelled to contribute entry fees to a cash prize pool or to the cost of medals or other souvenir prize awards. There has been very little opportunity for shooters to compete under tournament conditions for "fun" alone, with some public recognition for superior performance.

A very few years ago the Empire State Rifle Association, organized in central and western New York, endorsed a plan for use by their member clubs sponsoring tournaments to allow shooters to compete "for fun only" at a minimum Those electing to shoot under this plan (and it was shooters choice) paid a small flat fee (usually \$3.00) to reimburse the tournament sponsor for cost of providing tournament facilities. The scores of these competitors were posted in their proper rankings in the score bulletins but these competitors received no prize awards-the prize list being restricted to those who paid the normal entry fees for the matches. A rather small minority of competitors took advantage of this plan—but some did at any tournament where the plan was in effect. This plan has been put into use by some other tournament sponsors but, so far as we know, it has not been widely adopted in the

In reading "The Tournament Circuit" in this issue you will note that the sponsors of the Maryland and D. C. Smallbore Championships have carried the above plan a step further—requiring only a modest fee to cover minimum match expenses from each competitor and awarding no prizes except donated merchandise or trophies, or the so-called traveling trophies which were already available.

The Board of Directors of the Na-

tional Bench Rest Shooters Association Inc., at their most recent meeting in October, adopted a policy of allowing competitors in registered bench rest rifle shoots to elect whether they will shoot for "money" or "fun." Being the youngest of the national shooting organizations, with their working policies and shooting programs still in a "try it and find out if it will work" stage, they haven't had time to become "hide-bound" or stifled by precedent (and this writer hopes they never do).

It has been a generally accepted practice in bench rest rifle matches for the sponsoring club to require a registration fee sufficient to cover tournament expense and assist in the upkeep of tournament range facilities-this ranging from a normal \$3.00 a day to a specified maximum of \$5.00 a day at National Championship shoots. In addition, at registered shoots, the NBRSA requires a very modest fee for each NBRSA member and a somewhat larger fee for non-members, this fee covering the entire shoot period of one, two or more days. The entry fees have all gone into the prize pool and all awarded to the top shooters according to the prize schedule in effect.

Under the new NBRSA policy, the competitor in registered shoots will be required to pay the regular club and NBRSA registration fees. But, for the matches, the competitor may elect one of two courses. 1) The competitor may elect to contribute the specified match entry fee and be eligible to participate in the prize awards. 2) The competitor may elect not to contribute an entry fee, not be eligible for prize awards, but to shoot "for fun" only.

All competitors will be ranked on results bulletins according to size of groups or aggregates, regardless of whether they contributed to the prize pool. All competitors may be eligible for donated prize awards in matches that are entry free to all, or donated prizes which may be specifically indicated as "open to all." Any record group or aggregate fired by any registered competitor will be recognized by the NBRSA, regardless of whether or not match entry fees are paid, providing all other requirements have been fulfilled.

This writer does not expect this new policy of the NBRSA to result in a majority of bench rest shooters competing for "fun" alone, but the opportunity for doing that will be open to those who wish it. The policy may not be very popular with some of the top shooters, particularly at some of the larger shoots where the aggregate of possible prize winning is often quite sizable. But the NBRSA Directors must have believed, as does this writer, that the policy may aid in encouraging new shooters to try the competitive rest shooting, and to keep in the game some of those who enthe shooting and the good-fellowship at the matches, but who very, very seldom participate in the prize awards. looks like a step forward in making competitive shooting a more popular participator sport.

We do not believe there would be any objection to trial of some similar plan in other types of organized target shooting—and trial might prove it an aid to increasing the total number who might enjoy tournament shooting.

Be it for "fun, money or marbles," let's bend every effort toward making competitive shooting attractive to the greatest possible number of people.

PHT

THIRTY-NINTH ANNUAL AMERICAN SMALLBORE RECORDS MATCH COMING UP

The old and popular free rifle (.22 rimfire caliber) off hand postal match at 50 feet range, the American Smallbore Records Winter Match, will have its 39th firing in the period between January 1st and March 31st, 1957.

There are two matches in this program, the 100 shot championship and the 10 shot King Match, both being fired on reduced version of the old Scheutzen 25 count Ring target for the range of 50 feet. The 100 shot championship match does not have to be all fired in one session. The targets may be fired as one desires during the match period, but once a 10 shot target is started it must be completed. There is no "time limit" for shooting a 10 shot target. All record firing must be done in the presence of two witnesses who must attest the match certificate of firing. The fired targets and match certificate of firing must reach the match manager before midnight of March 31, 1957.

About the only restriction on the arm used is that it must shoot the standard .22 caliber rimfire cartridge. All the "free rifle" accessories may be used, including set-triggers and telescope sights. The shooting is all from the off-hand position.

We are advised that the targets for the 100 shot championship match will this year be on buff colored target tagboard, similar to NRA gallery targets. The targets for the 10 shot King Match will be the older style black on white, mainly to distinguish the target from those used for the 100 shot match. Target dimensions will remain the same as in the past.

Spencer J. Lanning, 2015 West Horne St., Sioux City 3, Iowa, who has successfully managed this match for several years, remains the match manager for the coming event. If not on the mailing list, but interested in this match, write to "Spence" for a program.

This is the only remaining Schuetzen type match in which the average shooter may conveniently compete. The match is not designed solely for the "hot-shot" competitors. It is set up to be an interesting match for everyone who enjoys offhand shooting and, for those who are not-so-hot, there are nice luck prizes to every fifth place all the way down the line, plus special donated prizes spotted here and there pretty well down the list. It is a good shooting match.

PHT

NEW YORK RANGE BEING EXPANDED

The 1000 yard range and the smallbore range at Karner, Albany County, New York, deeded by Karner Range Association, Inc. to the Forbes Rifle and Pistol Club last summer, are being increased in capacity to nine and sixty-five firing points respectively.

This is the only range that we know of in the northeastern U. S. where 1000 yard tournament competition is available. The Forbes Rifle and Pistol Club also conducts at least two smallbore rifle tournaments each season. Anyone not on the Forbes mailing list, who may wish to be in 1957, may mail a request to Dermot C. Reilly, 445 Western Ave., Albany 3, N. Y.

AMMUNITION FOR OLD TIME RIFLES

by Joseph S. Switzer

More and more shooters are becoming interested in shooting the old time or obsolete cartridge rifle. And many are wondering what the prospects are of obtaining ammunition to fit the particular caliber of arm they happen to own. Some may have inquired at their local sporting goods store for some of these calibers, only to be turned away empty and disappointed because so many of the old calibers are no longer manufactured, consequently not obtainable through the usual channels of trade. For these would be shooters and other beginners interested in shooting these old rifles this article is written.

During the latter part of the last century, or from approximately 1873 to 1900, many blackpowder rifles and cartridges suitable for target and game shooting from 100 to 200 yards or more were manufactured and sold by the various arms companies then in existence. Among those available were arms using such calibers as the 32-20, 32-40, 38-40, 38-55, 38-56, 38-70, 40-65, 40-70, 40-82, 40-90, 44-40, 45-60 and 45-90 Winchester as well as the 45-70 U. S. Government cartridge for which many different makes of rifles were chambered, including the Ballard, Sharps, Remington, Winchester and Marlin, as well as the well known U. S. Government Springfield.

Of the calibers listed, only the 32-20, 32-40, 38-40, 38-55, 44-40 and 45-70 are still manufactured and may be readily obtained from your dealer.

If he doesn't stock these particular items, he can order from his jobber and obtain them for you in a short while. These cartridges may be used in your gun 'as is' if you wish, although the jacketed bullets are hard on the riflings of the barrel due to the soft steel which was used in making those old guns. A word of CAUTION, however! Don't ever shoot one of these cartridges in your gun if it is one of the weaker rifles like the Trapdoor Springfield, Model 44 Stevens, Low wall Winchester or Ballard Rifles if the head of the cartridge has H. V. stamped on it or if the box in which it comes in is marked 'High Velocity.' I don't believe the ammunition people are putting up the high velocity loads in these calibers any longer, but you may still find some on dealers' shelves, es-pecially in small towns and out of the way places in thinly populated areas. Better still, in order to be safe, don't use them unless the literature on the box states that they are adapted to all standard arms, which would include the weaker rifles such as the ones listed above. Then, if your rifle is in good mechanical condition, you have nothing to fear.

However, if no other ammunition is available other than the High Velocity type, don't back down for that reason. The bullets may be pulled from the cases by means of any one of several bullet pullers on the market and the cases reloaded with cast (lead alloy) bullets and a charge of powder suitable to the arm you are using. The transparent inertia bullet puller recently developed and put on the market would probably be a good choice for any one with several calibers to reload, (I have one and like it very much) or if you are one of those 'cranks who doesn't want to take a chance on wearing out the barrel of his pet rifle by shooting jacketed bullets in it, you can

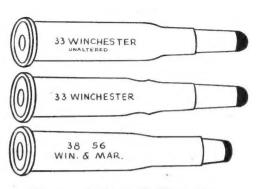


Figure I-Unaltered .33 Winchester

Figure 2—.33 Winchester Sized and ready for fire-forming to .38-56 Winchester

Figure 3 Loaded .38-56, using case fire-formed from .33 Winchester

pull those bullets by squeezing down on them with a vise and gently working the case back and forth and around until it loosens from the bullet and may be withdrawn. Then throw those bullets away as they will be lopsided, out of round and unfit for shooting and bury or dump that powder where it will do no harm, as it is of an unknown quantity as to composition, and start with a handloader's powder for which there is loading data available. Of course there is that old standby, black, with which you can't go wrong and we strongly advise that you use it, at least to begin with. We do not advocate the use of smokeless powder at any time. We only pass on the information that some shooters are using it with common sense and are getting good results. If you do decide to shoot some smokeless, take one of the suggested loads for the particular powder you intend to use as listed in the Ideal or Belding & Mull handbook, weigh all charges used and work up or down from that in 1/2 grain steps until suitable accuracy is obtained, always staying a few grains below that listed as maximum for the caliber you are loading. This writer has also been able to obtain new empty primed cases of Winchester make for the 45-70 within the past year and it is very possible that you may be able to order such cases in the other five calibers listed for which ammunition is still being manufactured. Then you could dispense with the bullet pulling operation. So much for the use of factory loads and/or components still obtainable.

About a year ago while looking around one of our local sporting goods stores for 'old stuff' I ran across a Model 1886 Winchester in 38-56 caliber in excellent condition. As I was examining it, the dealer said, "I've had that gun around a long time. I'll let you have it I started to put it back pretty cheap. in the rack with the remark that you couldn't buy cartridges for that gun any more when he said that he had two boxes (40) and a loading tool that went with the gun. I'm a sucker for the older guns so I paid him, picked up my bargain and went home. I already had a bullet mould for the 38-55—255 grain bullet which I found when I checked up was identical with that used in the 38-56. However, those old cases with the thin brass and folded head construction didn't last for more than two or three loadings, especially if you tried to load heavy enough to get much velocity. I was

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forced to admit that I would soon be through shooting that rifle unless I could find an additional supply of cases for reloading. Furthermore, I liked the gun and hated to lay it aside.

In reloading for the 45-70 I had noticed that the 38-56 was apparently the same case necked down. However, I could see that it wasn't practical from the standpoint of economy or possible from the tools at hand to perform that operation. Then I thought about it from the other angle, that of blowing out or fire-forming a smaller case to fit. They did it with wildcats such as the K-Hornet and Improved Zipper and that 1886 action was plenty strong - - . Besides the 45-70 there was at that time one other caliber with the same diameter head and rim thickness as the 38-56 still being made and sold.

I picked up a 38-56 cartridge and went back down to that Sporting Goods store and asked to see a box of .33 Winchester shells (see figure 1). glance I could see that they might be made to work, so I paid the man and trotted home again. I pulled a bullet from one of the shells and dumped it and the powder in a safe place, then tried the empty case in the chamber of the 38-56 rifle. It wouldn't go all the way in by about 36th of an inch. Then I thought of that old screw type Winchester tool, the one that had come with the gun. Maybe that would work as a die to size or reform the case sufficiently to get it to go into the gun! It did and when I took the .33 Winchester case out of the tool it had two stepped down shoulders and necks and looked like the drawing in figure 2. Then I refilled the case with the original load of powder, re-seated the bullet, loaded it into the chamber of the rifle and after tying the gun crossways to an old automobile tire which I have fixed up for that purpose, let fly by pulling the trigger with a long cord tied thereto after taking shelter behind a convenient stump located nearby. (However, there was really no danger in this as the pres-sure was quite low due to the smaller diameter of the .33 caliber bullet, the .33 Winchester rifle having a groove diameter of .338 and the 38-56 one of .379 and there was just enough fire-forming power in the charge and resulting bullet pressure as it left the case to go rattling down the barrel to form a perfect 38-56 case. (See figure 3.) Those .33 cases of late manufacture have good thick brass and solid head construction and are ideal for reloading, and even though not made any more by the various factories, many boxes are still available from dealers and jobbers throughout the country. used 35 grains of Dupont No. 3031 which is listed as maximum in the Ideal Handbook for the 38-55, a slightly smaller case than the 38-56, behind the 255 grain factory jacketed bullet with no signs of but 30 pressure or stretching of cases, grains is much more accurate and I have settled on that as a standard or regular load for hunting. For target and small game shooting up to 100 yards, haven't taken time to try any loads at 200 yards) 12 grains of Hercules 2400 will put the 255 grain cast bullet into the three and a quarter inch 10 ring of the 50 yard Standard American pistol target at 100 yards all day long, most groups running less than 2 inches, and I have loaded those 20 cases many times with no signs of any one of them as yet becoming unserviceable. The .33 Winchester case and this same method may also be used for forming cases for the 40-65 Winchester, and Lyman still makes Ideal Moulds for bullets of this caliber. will also work very nicely for the 38-70, 40-70 & 40-82 Winchester, but the cases will be about one-fourth inch short of the original and it may be necessary to load the bullet with the first land or two out of the case in order to get a good accurate load, or in the chamber Schuetzen style, ahead of the case which is loaded with the proper charge of powder using a thin cardboard wad on top to keep said powder from spilling out during handling and transportation. This wad will also and transportation. make for more uniform combustion and thus often materially aid accuracy. In the 40-65, 40-70 and 40-82 calibers it is not necessary to resize any part of the .33 Winchester case as it will slip right into the chamber as is. Some slight resizing may be necessary in the case of the 38-70, depending upon the individual rifle but in most cases I do not believe it will be needed.

About a year ago my son acquired a beautiful deluxe model Sharps-Borchardt rifle in 40-70 straight caliber. Like yours truly he just isn't able to pass up an old gun, especially if it is in good condition and apt to make a good shooter for the matches. That evening he picked up the rifle and hurried himself over to my place, this in spite of the fact that his beautiful young wife, who chose to come along, would probably have preferred some other sort of entertainment than that of listening to a couple of guys figure up a way to get something to shoot in an old rifle.

The 40-70 Sharps straight case dif-fers from the 40-70 Winchester mentioned in the paragraph before last in that the combined diameter of the head and rim is smaller and the overall length of the cartridge is somewhat longer in the Sharps. We had one loaded cartridge, thank goodness, to go by. It had a long paper patched bullet. We found a mould listed in the Ideal Handbook for a proper substitute of 330 grains which could be cast and lubricated for use in that rifle. Then, out came an old Stoeger's catalog and by comparing our sample cartridge with the illustrations and data in the ammunition section we decided that the 35 Winchester Model '95 cartridge might work for fireforming a case to fit. cartridge was discontinued after World War 2, but we thought some dealer might possibly have a box left on his shelves. We found a store that had two and after checking the 40-70 and the .35 Winchester with a 'mike' decided that it would work by converting or fireforming it in the same manner as had been done with the 38-56. It did, except that no resizing of the neck or shoulder was necessary and that operation was accordingly eliminated. You may well imagine that we went back down to that store and bought that second box! cases are about 1/8th of an inch short for the chamber but it doesn't seem to make any difference in accuracy, and again we got good strong brass and solid head cases to work with. We have shot that rifle a lot and the original 20 cases so obtained are still going strong and we have the other box of 20 still in reserve. The 30-40 Krag case can also be used in the 40-70 Sharps by using the fireforming process but this case being .30 caliber must expand twice as far at the neck as the .35 Winchester. This will cause some splits but it may be used if .35 Winchester cases are not available.

45-60 caliber cases can be made out of 45-70 cases. That is a simple operation of cutting off the 45-70 case to the shorter length of the 45-60 and resizing, if necessary, to fit the 45-60 chamber. The 45-70 case, although about ½th inch short, may also be used in the 45-90 Winchester or Sharps by loading a suitable bullet ahead of it 'Schuetzen style' using a wad to keep the powder in place, or the bullet may be seated at a shallower depth with one or two grooves extending out of the case.

The preceding paragraphs should serve to convince you that before you decide that you can't shoot that old rifle any longer because fixed or loaded ammunition can no longer be purchased for it, that it pays to check around a bit. Maybe some other caliber cartridge case can be utilized and adapted to fit and serve your needs. Of course, if you have the price you can nave cases turned out on a lathe to your order but this is an expensive operation that most of us cannot afford.

Now, about powders that can be used in the Old time rifles. Alas, those smokeless powders sold and used at the turn of the century or shortly after Lightning, Sharpshooter, Schuetzen and others, have long ago disappeared from the market. Of course, there is that good old standby, Black, and much of it is still being used, especially in the form of the so called 'cocktail' or duplex load consisting of a mall priming charge of some suitable smokeless like Dupont Pistol No. 6 or Hercules Unique, the balance of the case being filled with black powder. These loads shoot well and burn clean and no cleaning of the rifle is necessary while shooting. How-ever, black powder residue will cause rust even though non-corrosive primers are used, and the arm must be cleaned with water or a suitable solvent and oiled not later than the evening of the day the shooting was done.

Most dyed in the wool shooters eventually resort to one of the sporting or low pressure smokeless rifle powders presently available which are suitable for and can be used in the old time black powder rifles. Dupont No. 80, an old favorite, is no longer available and although its successor, No. 4759 is a suitable substitute in many respects, it does not seem to burn as cleanly in the smaller or lighter charges as the old No. 80. Another powder which can be used is Hercules Unique. However, the powder which has been found by most shooters of my acquaintance to be the most suitable, is Hercules No. 2400. Loaded in charges to give a muzzle velocity of about 1300 feet per second or less, it burns cleanly with low pressures and gives splendid accuracy up to and including 200 yards which is the maximum range at which one would ordinarily shoot. One should always start with a small charge and work up until an accurate load is obtained, staying well below the maximum charge listed in the Ideal or B & M handbook. For the 38-56, 40-65, 40-82, 40-70 & 45-60 class of cartridges which are not listed in the handbooks, use the loads specified for the 38-55 caliber as a guide and you can't go wrong if your rifle is in good condition.

As stated before earlier in this article, except when a shooter elects to shoot a box or two of factory ammunition with jacketed bullets in order to obtain cases for reloading, only lead or cast bullets are usually used in the old time

cartridge rifle. A mixture of about 1 part tin to 30 or more parts lead is usually used. You can tell by experimenting with different alloys shot from the bench or a rest. Some rifles will shoot closer groups with a harder mixture, others with a softer, or less tin and more lead. My old friend of many years standing, S. R. (Dutch) Siebert uses pure lead in his 45-70 Springfield and wins his share of the matches he shoots in. That particular rifle just likes extremely soft bullets and Dutch was just smart enough to find that out.

Most bullet casting is done during the winter months as it is a hot and exacting job and few of us care to tackle it in the heat of summer. Usually two or three or more of us get together and have a moulding and lubricating 'bee' taking our turn at doing one or the other. On a one burner Butane gas stove, two people can alternately dip and pour the lead to make bullets, each into his own individual mould, much as left and right handed wood choppers work together in felling a tree. The work goes easier this way and there is some competition at times to see who can cast the most perfect bullets in a given length of time. Suitable bullet moulds and a chamber or equipment for sizing and lubricating them to fit the old rifles may be obtained by ordering from your dealer. A most complete assortment to fit all of the old calibers can be found in the latest Ideal handbook.

There you are, that's the way to do it. Now, get busy and get set up to shoot that old rifle of Granddad's! There's a world of fun and sport awaiting for you besides teaching you coordination of eye, mind and muscle.

Final words of advice and caution Be sure your rifle is safe and in good condition. Have it checked by a competent gunsmith if you're not satisfied that it is. Never exceed the maximum powder charges listed for the various types and kinds of powder available to handloaders as shown in the Ideal, B & M or other loading charts. If you're still not sure, tie the piece to a tree, take cover and pull the trigger with a long cord. Also, as mentioned before, if the arm is in good condition it is always safe to use That's what those old Black powder. guns were originally designed for. you use the proper granulation, FG for the larger bores, 40 and 45 Caliber and FFG for the smaller calibers 25 to 38, you can't go wrong. Col. Stodter, one time Director of Civilian Marksmanship, has never, in over 60 years of shooting, used anything but black powder in the Old time rifles and he always shoots a good score.

Finally, remember we are all striving for accuracy, and moderate loads, or those well below maximum, are usually the most accurate loads. Precision shooting should be the goal of all shooters whether at game or the targets, and whatever you do, practice and preach safety at all times.

The United States Revolver Association annually conducts a very complete program of postal matches for handgunners, for both teams and individuals, and for all three gun calibers. For complete information on these matches and the USRA, write to THE UNITED STATES REVOLVER ASSOCIATION, 59 Alvin Street, Springfield, Mass.

FIFTH ANNUAL FLYSPECK POSTAL CHAMPIONSHIP



Fired Jan. 15 to Apr. 20, 1957. 50 shot individual match (entry fee \$2.00), two-man team match (entry fee \$2.00 per team) and grand aggregate (entry fee \$2.00). Cash prizes distributed to one fourth of the competitors and every tenth place thereafter. Write for program to

AL DELANEY

Hampden Road

No. Somers, Conn.

THE TOURNAMENT CIRCUIT

OKLAHOMA HI-POWER CHAMPIONSHIP

State Championship Ten High	
1st Lt. Jack L. Rinehart, USA	387 - 33
George E. Tubb, Tex. Civ.	382 - 30
SFC John C. Martin, USA	381-43
M/Sgt. Jack R. Beach, USA	381-35
M/Sgt. Marvin Fitzpatrick, USA	381-31
M/Sgt. Harold W. Hankins, USA	380 - 42
Maj. Ray Orton, USA	380-40
Herbert R. Coday, Kans.	377 - 23
Middleton W. Tompkins, Kans. Jr.	375-35
M/Sgt. Eugene F. Spradlin, USA	373-38

When 67 competitors registered for the Oklahoma Hi-Power Rifle Championship matches at Claremore, Okla., Oct. 6-7, and there was a range capacity of 50 for the heavy two-day match schedule, it presented a problem—but all were given an opportunity to shoot, though a few were unable to finish all the matches the second day because of darkness. Just over half the competitors were Army shooters, coming from Ft. Chaffee and Ft. Smith, Ark., Ft. Benning, Ga., Ft. Riley, Kans., Ft. Leonard Wood, Mo. and Ft. Sill, Okla.

Highlight of the tournament was the breaking of 10 shots at 1000 yards with scope sights national record by M/Sgt. Harold W. Hankins of Ft. Benning, Ga. Shooting at 4:30 Sunday afternoon, Hankins ran a 50-12V score to beat the old record of 50-7V. He shot a .300 Mag. in Douglas barrel on an old Remington 30-S action in a custom stock and his scope was a 2" 20X Unertl. He pulled bullets from Remington factory cartridges, reweighed the powder to 67 grains and substituted Sierra 180 grain Boat Tail bullets. Two other Ft. Benning shooters were 2nd and 3rd in this match, Maj. Ray Orton tieing the old record with 50-7V and M/Sgt. Eugene F. Spradlin posting 50-6V.

Middleton Tompkins, 1956 national junior Hi-Power Champ, presently of Lawrence, Kans., tied the national junior record for the 10 shots at 1000 yards with metallic sights match with his 49-6V runner-up score. Joseph S. Sturman, Junction City, Kans. won this match with a 50-5V score.

All matches were 10-shot events and all were won with possible 50 scores. The State Champ, Lt. Rinehart, won the 200 yd. rapid fire with 50-5V and was runnerup in the 300 yd. rapid with 50-4V. The best that George Tubb of Canadian, Tex. did in the championship aggregate matches was a 3rd place 48 in the 200 Yd. offhand match (won by M/Sgt. Jacob Svela, Ft. Benning, 50-6V) but he won the Varmint Rifle match, sitting at 200 yds., with a 50-9V.

SFC John Martin of Ft. Benning, who wrote "Mental Discipline Is A Shooting Fundamental" in July Precision SHOOTING, quite evidently practices what he preaches. He won the 300 yd. rapid fire with 50-6V, was runnerup at 200 yds. rapid fire with 49-7V, was 3rd in the 600 yd. iron sight with 50-6V, and his aggregate score indicates he had a real grudge against that V-ring.



M/Sgt. Harold W. Hankins, Army Rifle Team, Fort Benning, Ga., who broke the old National Record for 10 shots at 1000 yards with any sights with a 50-12V score at the Oklahoma State Match in Claremore, October 7, 1956.

Maj. Ray Orton won the 600 yd. iron with 50-7V and Ernest B. Skinner of Ft. Smith, Ark. the 600 yd. scope event with 50-7V.

LOUISIANA STATE SMALLBORE CHAMPIONSHIP

Ten	high	at	Shreveport	
F. M. Gibson	11.0			3192-228
Lynn R. Robe	ngon			3192-222
	LBOIL			3191-237
Inez Sargent				3187-238
G. R. Whitting	gton			
R. L. Sargent				3187-219
Earlton Smith				3184-213
W. L. Whittal	cer			3182 - 202
R. E. McMains				3182 - 194
Mott Dunham				3181 - 189
Chas. C. Clark				3179 - 193

A small but very talented group of 27 shooters enjoyed the fine hospitality of W. H. Womack and the Caddo Rifle and Pistol Club who sponsored the annual State Smallbore Championship at Shreveport, La. on October 20 and 21.

The Grand Aggregate winner and new La. Champion is a tea drinking Texan, F. M. Gibson who took home the silver tea service as his prize. Gibson out-Xed Lynn Roberson from Oklahoma by 6 X's.

Inez Sargent of Houston and George Whittington of Amarillo, Texas made the high X counts but lost too many tens. Chas. C. Clark of Shreveport was high Expert. There were no Sharpshooters. J. D. Goodwin was high Marksman with 3158-151.

MARYLAND STATE AND D. C. SMALLBORE CHAMPIONSHIPS

Top Ten at Beltsville Donald Davis Capt. Richard Hanson Carlton Dehart John Ruppert Freeman Morgan Robert Morgan (Jr.) Dave Brocklebank Edith Hanson Ruth Morgan	1595-104 1594-117 1590-100 1590-95 1587-97 1587-85 1585-89 1584-90 1583-86
Ruth Morgan John Grubar	1583-84

Maryland shooter Donald Davis, who started the 1955 season as a marksman class shooter, shot like a seasoned

(Continued on Page Six)



F. M. Gibson, Houston, Texas, the 1956 Louisiana State Smallbore Rifle Champion.

veteran to win the grand aggregate for the Maryland State and D. C. smallbore championships. He shot a 400-34x score in the final match when the pressure was on and he knew he must shoot a possible to win.

Bob Morgan, 15 years old, successfully defended his Junior title. This year he posted a truly fine score, only a few X's under that of his father, despite a recent bike accident that had turned his left elbow into raw meat. Bob's mother, Ruth, was only a point behind the new woman champion, Edith (Mrs. Richard) Hanson.

The tournament was fired on the National Capital Rifle and Pistol Club range at Beltsville, Md. with 45 competing. Weather was sunny but cool with shooting conditions excellent.

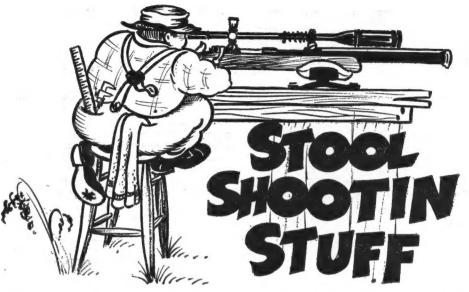
The usual two day program was of necessity cut to one day. Four 40 shot matches were fired, one at each 50 and 100 yards with metallic sights and one at each 50 and 100 yards with any sights. In order to provide a variety of shooting, and to combine scores into aggregates for which trophies were available, one 20-shot stage of each fired match was shot on the decimal target and the other 20-shot stage on the metric target. This makes the top aggregate scores more noteworthy than they might at first appear

A most unusual feature of this tournament was that there were no match entry fees. A very modest registration fee of \$1.50 was set to merely cover cost of targets, printing and mailing. The only prize awards were the available traveling trophies and a few donated merchandise awards. Honorable mention was given in the official bulletin to the aggregate "Top Ten," to the three high in each class, and to Hi-Lady and Hi-Junior. Those receiving honorable mention were privileged to purchase an appropriate medal, at cost, through the tournament sponsors, if they desired to do so.

NEW JERSEY "VICTORY MATCH"

Winding up the season of the New Jersey Smallbore Rifle League, the annual Victory Match drew a fine entry of 67 senior shooters and 83 juniors.

(Continued on Page Fifteen)



Dear Phil:

The "Third Nationals" are over and my! what a good time I had. It was rather a "fur piece" for Merrie Stuhlschuter, Jack and me to travel for a bit of shooting but it was certainly well worth it. I know everybody couldn't make the shoot and to those who couldn't, we who went want to say we missed you, and in turn, you missed meeting some mighty hospitable folk.

We packed the Stool Shooting Safari Wagon full with just about the same gear we take to the eastern shoots. When we were finished, there was mighty little room left for clothes and still leave enough visibility through the back window to see if a traffic cop was trailing us. We knew we had to travel pretty fast because we had lots of country to cover.

After an overnight stop in Pennsylvania to visit relatives, we started for Staunton to take in that shoot. As we passed Gettysburg, we stopped to listen to a review of the battle and go over the battlefield. The experience was very inspiring and made me realize more than ever what a country of shooters is our heritage, whether we come from the North or from the South. What fine marksmen there must have been in those days, and it is unfortunate that those many lives could not have been spared to shoot for pleasure as we do, whether it be at target or game. Just a little bit more broadness and tolerance makes everything go so much smoother and we should realize that in our own organization. It seems to me to be too bad to find among us, in every community or enterprise, some who want to run the other fellow's show and impose completely their will on his. I have lived long enough to know that the majority is not always right but also long enough to know that what we think is right today, we are not always so sure of tomorrow.

The shoot at Staunton was a pleasant one, as it always has been for me. It is a pretty range with a beautiful background, and the shoot is handled by fellows who are always anxious to see that the contestants enjoy themselves. I believe, Phil, they are definitely on the right track with the separate relay system for the 13 lb. or less rifles. I packed one along with me just so that I could enter and see how it was to shoot two rifles and how they compared with

one another in their own class, as well as competitively. I cannot help but admit there is more kick in shooting the light rifle than the bench rest type. I did pretty well with both of them and fully convinced myself that my bench rest rifle was "hot" enough for the national competition. The light rifle was the one that amazed me and convinced me that fellows are silly when they abandon some of their bench rest barrels. Mine was a barrel I had used for nearly three years and had certainly as much as 5000 rounds through it before it was turned down to below the required specifica-tions. I had it around the cellar and never bothered to stock it, but now I guess I will have to because it shoots so well. For that match, I merely glued a block of wood into the magazine cut and opened up the barrel channel sufficiently on an old 722 stock to allow the action and barrel to be bedded free floating. I cannot say that I missed the wide fore-end too much and I have always contended that there is nothing wrong with conventional shaped stocks. I hope the light rifle matches increase in number because I sincerely feel that it is from the group of fellows who own and frequently shoot such rifles that we will get our growth. As a matter of fact, the National Shoots are held in areas where thousands of shooters own rifles of Varmint or long range flat shooting type, and if these shooters were encouraged to join the meets, many of them would recognize the fact that they are marksmen enough, and have equipment enough to immediately join in the sport.

Well, Phil, I did all right at Staunton, and after a very pleasant visit at Harry Cook's house and shop the next morning, was ready to take off for Texas. Harry started me out by giving me one of his little tools for measuring the proper depth of throat or chamber. It sells for less than \$4 complete and although it comes equipped with a bullet in place, it is so designed that the user can, with a straight line puller, change bullets by inserting the type that he uses or prefers to measure. Harry's little case trimmer is also a handy gadget.

After reading the article in Precision Shooting, and talking with the boys at Staunton, I got quite a yen to see the Zink range with my own eyes. I altered my course to take us through Tulsa, and I believe it was worth while. I think the range will make a fine place for a Na-

ULTRARIFLED BARRELS

are better barrels.....

Mr. Shooter, Mr. Gunsmith, Mr. Dealer:

I believe the ULTRARIFLED* (T. M. Reg. Pat. Pend.) barrel is the best production made rifle barrel that you can get today, bar none. They are super-smooth inside (2 to 3 micro inches) and require no lapping for finest accuracy. Here are some of the wins recorded this year by shooters using these barrels . . .

- H. L. Culver of Silver Spring, Md. set a new world official record of .4016 inch for 10 shots at 200 yards at DuBois, Pa. in May. First time EVER that this match went to the same make of barrel two times. Former record held by Sam Clark, Jr., group .5276 inch, set in 1954 at DuBois.
- Julia Culver, 14 year old daughter of H. L. Culver, shot second place in the 100 yard aggregate at Reed's Run Rifle Range in Augusta, Ohio with an average of .309 inch for the ten 5-shot matches (50 shots) over 30 of the East's best shooters. Linus Douglass won the aggregate with .301 inch average.
- Linus Douglass and Homer Culver ran neck and neck in several matches such as DuBois, Pa., Altoona, Pa., Lewistown, Pa., to take important places in aggregate scoring—Douglass taking 3 second aggregates in a row—and Culver taking the 200 yard aggregates in two instances, as well as the grand aggregate in two instances. Culver shot a chrome-Moly barrel 2 years old and Douglass shot a stainless barrel sold and fitted in 1956.

G. R. DOUGLAS

5504 Big Tyler Road

Other wins were scored in Bench Rest matches too numerous to mention by such fine shooters as Al Creighton, Sam Clark, Wm. Brown and many, many others.

- M/Sgt. Francis Conway, Jr. of the U. S. Army won the famous WIMBLEDON match THE SECOND TIME IN SUCCESSION. This being the first time a man has succeeded himself in winning this 20 shots at 1000 yards with any rifle and any sights match in 27 years. He shot the same .300 H and H rifle as he did last year.
- M/Sgt. Hankins of the U. S. Army took the 1000 yard scope sight match at Bartlesville, Okla. in early October to set a new record of 50-12V for this match. The old record was 50-7V. Hankins also shot a .300 H and H rifle.
- Further, there were many important wins by many rim fire shooters whose outfits were barreled by rim fire experts such as W. H. Womack of Shreveport, La. and Lee A. Swem of Portland, Oregon.

All the foregoing barrels were ULTRARIFLED barrels, having no additional hand treatment of any kind done on them. They were not selected in advance by trial. All were sold, or installed, by GRADE ONLY.

This is why I believe ULTRARIFLED barrels to be the world's best production-made rifle barrels that can be had, anywhere.

Ask for free data on all services.

Member N. B. R. S. A., Life Member N. R. A.

Charleston 2, West Virginia

tional Shoot if work on the range and facilities continue at the same rate of progress that has been made so far. It is not yet in my opinion a suitable range for a National Shoot. I missed meeting Mr. Zink by some 20 minutes but I am assured he is a man of very firm purpose and I have no doubt he will continue to greatly improve the range which he has so generously made available to the shooters of the vicinity. I should expect conditions to be very similar to those at San Angelo as far as heat, dust and mirage are concerned. The targets will not be in such a restricted area as those in Texas and shooters will probably not find such erratic wind conditions.

Another reason for going through Tulsa was to see A. L. Day's setup for making the fine stainless barrels which he is producing. I had quite a bit of correspondence with Charlie Neumann and he was the first to tell me how meticulous Day was. I found Art to be a fine fellow and his barrels to be everything that Charles said they were. No wonder the fellows in the Southwest are shooting these barrels with considerable success. They have quality built into them by a very careful and capable hand using some modern high quality stainless steel and with equipment made and designed by Day.

I anticipated meeting the famous and colorful Barney Auston, but time was short, and I did not get that pleasure until I found that he had drawn the bench right next to me at the San Angelo shoot. I certainly enjoyed shooting alongside Barney, but Lady Luck could

ANNOUNCING.....

A 1957 line of match rifles . . . In .22 I will have a new prone stock (and complete rifles) W52, Rem. 40X and Walther heavy. A bullgun stock very similar to the above .22, and a complete bullgun on single-shot action with guaranteed accuracy, at \$200.00. The Walther .22 free rifle has been further improved, same price, \$190.00 at this time. Have a new Finnish type palm rest, as per type used on the Anschutz free rifle, of solid aluminum, at \$15.50 complete, fully adjustable. Complete free rifles, .22 or centerfire, with full-length guard and swivel base combined. A new "do-it-yourself," a 300 meter free rifle, 6.5 mm or .30, finished and blued barrelled action. 95% finished stock with the buttplate set installed, all metal parts including new style full rail and above palm rest, action new single shot bolt type with imported free rifle trigger, \$190.00 without sights. (Only twelve of these can be furnished this season) An improved model .30-06 NRA match rifle with stock that takes the strain out of standing, the work out of rapid fire, M70 actions, guaranteed accuracy, \$220.00 without sights, \$245.00 with Redfield International rear, choice of any stell front. A few other things coming up . . . some new literature, including data on Walther target rifles. Several target and free rifles in stock, .22 and center-fire, M70 sporter stocks and barrels, miscl. stuff—write for closeout list.

Anyone considering my equipment, please get information and orders in soon. Don't have to have the cash but do have to get my spring schedule organized. Might even arrange those uneasy time payments if you can prove you never stole a hot stove.

Yours,

ROY F. DUNLAP, GUNSMITH

2319 FT. LOWELL ROAD TUCSON 11, ARIZONA

have been kinder to us and given us both a better location.

Before proceeding to San Angelo from Tulsa, I stopped at Wichita Falls for a few days and had some very interesting experiences with other gun lovers. My cousin, who is Deputy Commander

of the Air Base and with whom I stayed, had told me of a gunsmith and shooter in town who was quite prominent in shooting circles before he lost a hand in a gun accident. His name is Ed Morton and when I found him in his new little gun shop at Wichita Falls, I had crossed (Continued on Page Twelve)

National Bench Rest Shooters Association, Inc.

A NEW 200 YARD RECORD IS OFFICIAL

The 5-shot group at 200 yards, fired by Harold A. Zeiser of Nescopeck, Pa. at the registered shoot at Wilkes-Barre, Pa., August 12, 1956, has been officially measured as .2756 inch, center to center of widest shots, and has been approved new National Record by the NBRSA Judging Committee.

For shooting this group, Zeiser used a Hart barrel, 1 in 14 inch twist and 29 inches in length, chambered for the .222 Rem. case and fitted to a Rem. action by Clyde Hart, which with Lyman scope had a total weight of 18 pounds. He used a 50 grain bullet made in B&A dies

and 21 grains of powder.

The only group records not broken during the 1956 season are the 5-shot and 10-shot 300 meter records. Only one 1956 registered shoot scheduled any 300 meter matches-a 300 meter two match aggregate was scheduled and fired at DuBois, Pa. on June 1st.

1956 NATIONAL CHAMPIONSHIP STATISTICS, SUMMARIES AND COMMENT

All 6 regions of the NBRSA were represented by shooters at the National. The Golf Coast Region, hosts to the shoot, had 22 competitors from Texas and I from Louisiana. From the Eastern Region, Ohio had 9, New York 5, Penna. 5, Mass. 2, and Florida and Illinois one each. Mid-Continent had 5 each from Kansas and Oklahoma. Northwest had 5 from Washington and 1 from Idaho. North Central had 1 from Wyoming (The Champ), 1 from Nebraska and 3 from South Dakota. Southwest had 1 from Arizona and 2 from Southern California. The competitors came, literally, from the four corners of the country, but there were great wide spaces in between with no representation—shooters from only 17 of the 48 states.

Only four of the 1955 "TOP TWENTY" competed in the 1956 match-

es and three of them, Ed McNally, Paul Gottschall and Wallace Hart, made the 1956 "TOP TWENTY." The 1955 Champ, Sam Clark Jr., was not present

to defend his title.

Top three in the 10-shot matches making up the National Match Course

At 100 yards:—#7—H. E. Powers, Okmulgee, Okla. 356"; Ira Norris, Kerrville, Tex., 362"; Roy Meister, Seattle, Wash., 371".

#8-Clyde R. Hart, Lafayette, N. Y., .274"; Brunon Boroszewski, Buffalo, Y., .361"; A. L. Day, Tulsa, Okla.,

#9—C. C. Hankins, Buffalo, Wyo., 329"; Ed McNally, Fayetteville, N. Y., 352"; H. W. Barton, Wichita, Kans., 370".

#10-Crawford H. Hollidge, Marstons Mills, Mass., .346"; Robert Smith, Dallas, Tex., .348"; George George Mc-Smith, Dallas, Tex., Mullen, Minerva, Ohio, .420".

#11—Laurence Rucker, Akron, Ohio, .341"; H. W. Barton .347"; Ed McNally .359".

At 200 yards:—#14—George McMullen 1.077"; Paul O. Gottschall, Sal-Mullen 1.077"; Paul O. Gottschall, Salem, Ohio, 1.117"; Coleman B. Brown, Corpus Christi, Tex., 1.277".

#15—Robert W. Smith .577"; C. C. Hankins .688"; Boroszewski .977".

#16—Brunon Boroszewski .901"; H. Shipley, Dell City, Tex., 906"; William S. Coleman, Burleson, Tex., .975".



John I. Moore of San Angelo, Texas, an ardent bench rest shooter, a diligent promoter of rest shooting in the Gulf Coast Region, who was largely responsible for the work of organizing the very fine 1956 National Championship Shoot at San Angelo.

#17-C. C. Hankins 1.104"; George McMullen 1.122"; W. M. Brown, Augusta, Ohio, 1.189".

#18—R. H. Roark, Waco, Texas, .948"; Boroszewski .993"; Crawford H. Hollidge 1.046".

For winning the National Championship, C. C. Hankins was awarded the FIELD & STREAM CUP, the oldest National Championship trophy donated by FIELD & STREAM magazine; the impressive WHELEN TROPHY, donated by the brothers John I. Moore and the late P. D. Moore in 1954; the new BAUSCH & LOMB Engraved Copper Plaque, donated by the Bausch & Lomb Optical Co. this year; the Sponsors Plaque and medal. And for winning the 200 yard aggregate he was awarded the SIERRA TROPHY, donated by the Sierra Bullet Co., and the Sponsors Plaque and medal.

For winning the 100 yard aggregate, H. W. Barton of Wichita, Kans., was awarded the SPEER TROPHY, donated by Speer Products Co. of Lewiston, Idaho in 1955, and the Sponsors Plaque

and medal.

Of the "Top Twenty," 16 shot the .222 Rem. case (including the champ) and 4 the .219 Don case. Sixteen shot Hart barrels (Hankins did), three shot Douglas barrels and one a Pride barrel. Three used Hart actions (Hankins did) and two used Weber actions. Of commercial actions there were 9 Rem. 722, 3 Mauser (2 FN), 2 Win. M70 and 1 Enfield. Ten used Unertl scopes (the Champ did), eight used Lyman and two used the new Bausch & Lomb. Nineteen shot hand-made bullets, either made by themselves or by custom bullet makers, and Ray Speer shot the product of his own company.

The overall equipment breakdown

was as follows:

Caliber: All but one of the 70 competitors shot .22 cal. rifles. The cases were: .222 Rem.—44; .219 Don—18; .22-250—2; .219 Imp. Zipper—1; other .22—4; .243—1.

Barrels: Hart—41; Douglas—13; Pride—5; Day—4; Pfeifer—3; Gregoire, Apex. Papernek and Johnson—1 each.
Actions: Rem. 722—28; FN and

other Mauser—19; Hart—6; Schultz and Larsen—4; Weber—3; Win. M70—3; Larsen—4; Weber—3; Win. M70—3; Enfield—2; Forster—1; Powers—1; not reporting-3.

Scopes: Unertl-41; Lyman-22; Bausch & Lomb-4; Litschert-1; not

(Continued on Page Eleven)

THE OFFICIAL NBRSA MEASURING DEVICE

The NBRSA Board of Directors, at their annual meetings in San Angelo, Texas, during the National Shoot period early in October, adopted the Sweany "Reticle-Rule" as the official NBRSA "Reticle-Rule" as the official NBRSA measuring device, and the ONLY measuring device to be used at NBRSA registered matches.

The "Reticle-Rule" was originated and developed by Mr. John B. Sweany, 187-A Silverado Trail, Calistoga, California. It had its first field tests at bench rest matches in 1955, and was improved for convenions. for convenience and practicability in use as a result of that testing. During the 1956 shooting season the improved device has been field tested at many, both small and large registered matches, and has proven to be consistently very accurate in measurements, even when first used by operators having had only brief instructions in its use. Its precise measuring has proven to be fast and convenient, even when being used for the first time by operators, and it is very portable-a feature that optical measuring devices tried in the past have sadly lacked.

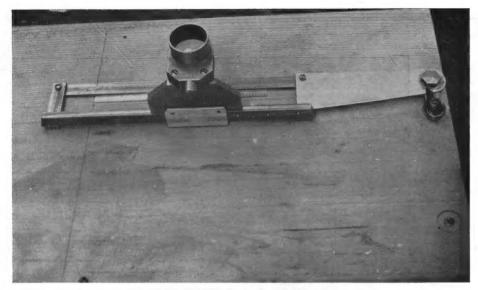
Three of the Reticle-Rules were in use at the National Shoot in San Angelo and it is reported that the statistical group of Mr. and Mrs. Ramsey Powell, Miss Bernadine Allen and Ed Phillips, assisted by Mr. Sweany, were on several occasions timed measuring and posting targets at the rate of 12 to 15 seconds each-and they were reading measurements to plus or minus 2 or less thousandths. As a check on their work, all five frequently measured the same target and were usually within 1 to 3 thousandths of each other. With this speed, and a maximum of 36 targets per relay, the target measurements were posted in a very short time after the targets were brought in, and the statistical group had plenty of time to get out and watch the shooting, as well.

Probably the greatest single advan-tage of the "Reticle-Rule" is that the bullet holes in the paper are not disturbed at all in the measuring, thereby allowing repeated rechecks of measurement, if necessary or desirable. In the case of important small group targets, this fea-ture would permit three or more persons to make a predetermined number series of measurements each, and the average of all measurements taken for the accept-

ed measurement of the group.

Another valuable feature Reticle-Rule was discovered during the field tests at matches-it was found that by the aid of the good lens and the accurate method of centering the bullet prints, that very close doublet shots could be quite positively identified. This was not so important for the groups on the target itself as it was in some cases for determining the number of shots on the backer target (where very close doublet shots can and do occur).

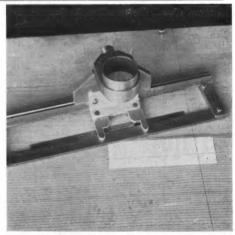
The illustrations explain the Reticle-Rule better than words can. Illustration No. 1 shows the Reticle-Rule on its baseboard, pivoted so that the end of the



Sweany "Reticle-Rule"-III. No. 1

measuring scale is exactly at the intersection of the right-angle cross lines on the board (you are viewing it from the operator's position). The crosslines are more clearly shown in illustration No. 2 (here you are on the opposite side of the board from the operator). Illustration No. 3 shows a target in place for measuring (you are facing the operator). Note the precise centering of one bullet hole and the horizontal line on the board bisecting the two widest shots of the group. The movable unit with lens is then moved along the legs to center the opposite extreme bullet hole of the group and the measurement read directly from the scale on the leg. The extreme spread of close groups may be quickly and accurately determined with the rule.

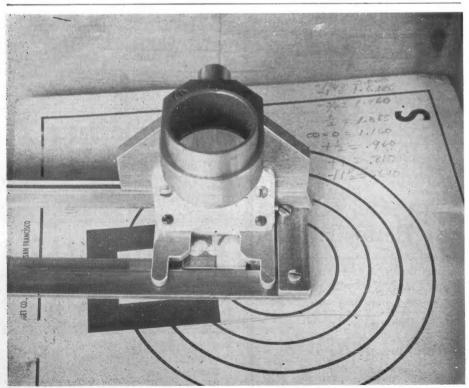
The adoption of a single style of measuring device for use at all NBRSA registered matches should tend to assure more uniform target measurement throughout the country. Sponsoring clubs may purchase one of the Reticle-Rules from Mr. Sweany, who will be able to make the number probably required, or may rent one for use at their register-



Sweany "Reticle-Rule"-III. No. 2

ed shoots from their Region. The price will be \$40.00 mounted on board ready for use, or \$37.00 without the base-board, which some clubs may prefer to make themselves.

PHT

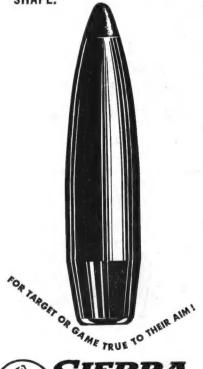


Sweany "Reticle-Rule"-III. No. 3

SHAPE SHAPE SHAPE SHAPE SHAPE



Early scientists discovered that a drop of hot lead falling in a shot tower formed a perfect ball. Seeing this natural phenomenon the first bullet manufacturers made ball-shaped bullets. Modern ballistics experts know that a bullet must penetrate the air, not conform to it. Therefore, SIERRA BULLETS are scientifically designed to shoot farther and give maximum accuracy because of their perfect SHAPE.





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UNERTL ULTRA VARMINT SCOPE



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Complete with mounts and bases \$115.00

Target scopes in objective sizes from 3/4" to 2", powers from 3X to 24X.

Prismatic Spotting Scopes 20X54 ______\$64.00 Prismatic Spotting Scopes 24X63 ______80.00 Right Angle Spotting Scopes 24X63 96.00

BIG GAME HUNTING SCOPES:

23/4X Falcon \$48.00 — 4X Hawk \$52.00 — 6X Condor \$66.00 JOHN UNERTL OPTICAL CO.

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Model 200

Engineered to give you controlled travel—and control-led pressure—a lifetime of troublefree service for the shooter who wants the best. Press-\$49.50 Dies-\$12.50

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If it's done with OUNDER it's done right".





Better Blanks

FOR

Better Rifles

Carefully laminated of choice Mahogany and Walnut. Selected varieties carefully paired to give stability and pleasing color contrasts. Write for prices and details.

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MARSTONS MILLS, MASS.



The ORIGINAL light weight tripod rest
Seven years in use coast to coast
Weight 3½ lbs. Tray width 5½ inches
Prepaid price in U. S. A. \$22.50. No COD.
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Specializing in barreled actions and complete precision-made rifles. We install HART Bench Rest Barrels and all other popular makes. Restocking-reblueing-

complete rifle service.

HOLMES BENCH REST BULLETS hand-made in tournament grade—.22 and 6mm calibers. .22 cal.—\$4.25 per hundred postpaid. 6 mm-\$6.00 per hundred postpaid.

17 cal. bullets 25 and 30 gr. tournament grade _______\$4.25 per C prepaid Packed 200 per box

Varmint rifles custom made-Prices start at \$155.00.

The precision made, fully adjustable HOLMES BENCH REST PEDESTAL at \$25.00 FOB Mattoon, Illinois.

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SHOOTERS
KENRU Soft Swaged Bullets, 45, 50 and 55 gr. Guaranteed less than ½ gr. variation. 22 caliber Gullding Metal Jackets: KAMPEN for 50 & 55 gr. bullets @ \$8.50 per M postpaid. SIERRA for 50 & 55 gr. bullets @ \$10.00 per M postpaid. 3/16" lead wire (25 lb. spools) in good supply. supply.

Please inclose stamp with inquiry.
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1956 National Championship (Continued from Page Eight)

Bullets: Hand-made by shooter or custom bulletmaker—65; Sierra—2; Speer—1; MGS—1; not reporting—1. Forty-eight definitely indicated bullets made in B&A dies, and one (7th ranking shooter) indicated R. C. B. S. dies.

Rifle weights: Ranged from 13 to 40 pounds. For the "top Twenty" shooters, ranged from 13 to 31 lbs. with an average of 21 lbs. H. Shipley of Dell City, Texas, in his first year of competitive rest shooting, ranked 7th using a 13 lb. rifle.

It was interesting to note the increasing use of ball powder—19 of the 70 shooters were using it—15 of them in the Rem. 222 case. Charges in the .222 case ranged from 23 to 25 grains, with most using 23.5 or 24 grains. W. S. Coleman, 11th ranking shooter, used 29 grs. ball powder with 53 gr. bullet in the .219 Don case.

Sixty-two completed all matches for a National Match Course aggregate. There were no NMC aggregates under half minute of angle but 14 shooters had aggregates under three quarters minute of angle. Thirty-five had aggregates between three quarters and one minute of angle. Thirteen had aggregates one minute of angle or over, with only one over minute and a quarter (1.474).

With 67 shooting five 10-shot groups at 100 yards, 5 had aggregate averages under half inch; 39 had between .50 and .75 inch average; 20 had between .75 and 1.00 inch average; and only 3 had averages of an inch or over, the biggest being 1.159 inch.

At 200 yards, 62 shooters completed the five 10-shot matches for an aggregate average. Of these, 8 had averages under .75 minute of angle; 18 were between .75 and 1.00; 21 were between 1.00 and 1.25; 12 between 1.25 and 1.50; and 3 had averages of 1.50 minute of angle or over, the biggest being 1.857.

In spite of difficult conditions throughout the two days of the NMC shooting for the Championship, and reported particularly bad on one end of the firing line where some former record breaking shooters were firing, this is mighty fine average accuracy by this representative group of shooters from all sections of the country.

Since many lower ranking shooters were using equipment of the same type and (supposedly) grade as the winners, it would appear that shooter skill still needs to be added to top-notch equipment to win rifle matches, even in rest shooting. Man is the master of equipment—but the smiles or frowns of "Lady Luck" can never be entirely ignored in any particular shooting match.

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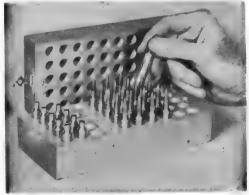
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GLENN J. THOMAS, 53 TERMINAL PLACE, BEND 3, OREGON

Stool Shootin' Stuff (Continued from Page Seven)

the threshold of one of the most modern shops that I have entered in a long time. Everything was new and spic and span, and the stocks were very generous and well balanced. The people in that area are certainly served by a fellow who knows his business and has the courage to invest in modern merchandise.

On my road map, I had noticed the town of Iowa Park not too far from Wichita Falls, and to me Iowa Park is the home town of a fellow who has done much for us varmint shooters. Much in the past, and still doing it, is the impression I got after driving over to see Mr. and Mrs. Sisk. They are varmint hunters and shooters themselves. Although Mr. Sisk did not shoot in the National,

he and his wife did attend and fully supported the activities. We all owe the deepest debt of gratitude to Mr. Sisk for giving us bullets during the war period when they were hard to get. His new bullet is better than the old, and in next month's issue, I should like to mention a few important developments going on among the bullet makers which will assure our receiving bullets that are more accurate than any of those commercially available previously. Frank Snow of Sierra was at the match, and Mr. Speer and Mr. Baldwin were also competitors who gave a good account of their products.

I got to San Angelo Sunday evening before the shoot and found that a number of others had preceded me. From then on, car after car rolled in and it wasn't long before Beaver Lodge was completely taken over by shooters, Some of the other fellows stayed at other nice places, but we found the Lodge very centrally located and the focal point of activity. Some of us went out to the range on Monday and Tuesday. I got a little practice in at different benches, and found the wind to be about 7:30 and although mirage was evident, it did not seem to be so much of a handicap as in the past, perhaps due to the clearer and drier air. My practice groups were good and when I reached in the hat to draw my bench for the shoot and pulled out bench #1, I was pretty pleased with myself because had I been able to choose my bench with the knowledge I had at that time, I would have taken just that bench. What a sad awakening I got later! The wind shifted the next morn-What a sad awakening I got ing, got very gusty and came in from 3 to 5 o'clock for the full period of the shoot, and the man-made cliff to my left, resulting from the excavation of the range, became a boiling cauldron of tur-bulent air. I know I have never had a finer bench gun than the beautiful one which John Warren made for me before that shoot, and I don't think I ever held better or had a sharper sight picture, but I am doggoned if I could much more than get into competition. I was much pleased to do better than most of those about me, and delighted when I garnered a first and a couple of thirds, but as statistics show, nobody at the left end of the line placed in the top rankings.

For some time, my pal, "Crawf" Hollidge, has been toying with an idea of a rotation system. He is going to outline it in a later issue, and I think it should overcome the faults of the previous system as well as the luck element in the present system, by giving each shooter an opportunity to shoot from all sections of the line.

You will be receiving a full report, Phil, of all the statistics so there is no use in my going into that in this column. You will probably get a report on some of the new rules that were made pertaining to rests and procedure. We in the East felt it was the fellows in the West who wanted to outlaw mechanical devices. Judging from the number up and down the line at that shoot, mechanical devices are not going to be outlined very easily nor very quickly, and the western boys seem to be strongly for them. The new rule may help some, and most of the fellows think it is worth trying. I still think I will use my simple rest and sand bag, and not go to the extent of taking my lathe apart and using the bed, cross feed and all, as did one of my friends a few benches away from me. He was entirely within his rights in using it, as were the many others who had ingenious, and sometimes intricate and expensive gadgets made in an attempt to overcome the wanderings of their shots. However. it still seems to me that a gun should look like a gun and be shot like one. It was obvious that the "things" did not cope with conditions adequately enough to distinguish themselves. They leave me feeling rather cold, as did my own which I made and discarded in previous years. I noticed in attending the eastern shoots there were a lot of others who feel as I do, and I should enjoy a referendum, if we could restrict it to those shooters who actually entered matches last year. There are doubtless others who are not entering matches because they feel we are going off the deep end in the devices which we use to obtain the

ultimate in accuracy, as we call it. Perhaps we will hear from some of them. I hope so.

The new rule permitting contestants to enter matches without putting up money for cash prizes was a good one to It will keep in our contests fellows who cannot afford the extra dollars in a gamble, and often in a gamble in which they know the odds are tremendously against them. I believe also that new shooters will enter the contests more readily and certainly we should welcome them.

The shoot was not without its hilarious occasions. I took great pleasure in assisting in the arrest of Ray Biehler who was met as he stepped off the plane by a uniformed officer. I thought it particularly fitting that Mr. Sisk act as the sheriff and firmly clamp the handcuffs around Ray's wrists. Ray soon caught on to the fact that it was a gag, and although some 50 or 60 of his friends were in hiding in the airport lobby to witness the arrest, there were few of them who saw Ray's face in anything but his usual smile of happiness and good nature. The police officer 1ed us through town to the wailing and screaming of sirens and it was a ride long to be remembered. I have never been in a convoy that zig zagged through so many cars and red lights. By the time we reached Beaver Lodge we had most of San Angelo well aware that the N. B. R. S. A. were in town. Just to add to the hilarity, Bruno Boroszewski and I organized a mock trial for Biehler. Bruno did an excellent job as prosecuting attorney. The witnesses for the prosecution and the defense showed much hidden talent but the star of the show was our yet-tobe National Champion, Charlie Hankins. He acted as judge and although Roy Bean has gone down in fame and history, forever Charlie Hankins will be to me my idea of the judge in the old days of the West.

Phil, the shoot went off like clockwork. The weather was boiling hot so we were all glad to have the events finished as early as they were in the after-noon. There wasn't anyone there who didn't have the greatest admiration for John I. Moore. His brother, too, must have looked down and called the job well done. Surely, John loves the game and was tireless in his efforts to make the shoot a true memorial to his brother.

John Rives, Ed Phillips, Coleman Brown, and a number of others left us with a fine impression of Texas and its citizens who so zealously worked to give us a good time.

There should have been more western shooters there, and I cannot understand why they did not attend. Facilities were available for double the number who did shoot. Considering the interest there is in shooting in that area, I expected more visitors at the matches, but I guess the number of visitors is probably largely influenced by the convenience of the range location.

The national champion was not decided until after the last shot was fired. It was being contested throughout the last day by a number of fellows and I would have been glad for any one of them to have won it for they are all cap-

able and keen competitors. Nothing better could have happened to the game, in my opinion, than to have Charlie Hankins win it. He is a fine example of what a national champion should be. His modesty and ability match in intensity, and those who know him have long

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recognized that no finer fellow handled a gun or will ever walk off with a national championship. I will be one of those in the East who will be trying to bring the trophy back next year, but now it rests safely in the hands of Mr. and Mrs. Hankins, a couple who were admired and enjoyed by all at the match.

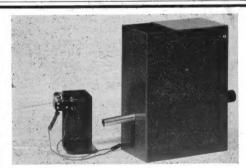
And, Phil, I can't sign off without saying a word about the girls of the "stool shooters" who add so much color and charm, and take their fun as they find it which this year included a trip to

Mexico, leaving some of us a bit depleted in pocketbook, but all of us much happier for our experience.

Crnest Stihlschuter

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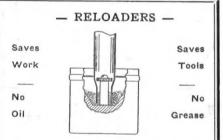
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THE SHOP

NUTS 'N BOLTS By Roy F. Dunlap

We are now in the beginning agonies of another gallery season in most re-gions, and many a shooter wonders what happened to the partnership he had with his rifle a couple of months back . . . it feels like a club. The butt is too long, the grip's too big, the forend feels as though it belongs to somebody else, comb is too low in one position and too high in another. Of course, he's been deer hunting and duck hunting with light weapons, is wearing several layers of clothing, and his body is much stiffer now than it was in August . . .

Gunsmiths who shoot gallery themselves now catch it in the neck, as well as the ear. The boys want their stocks altered right away. Shorten it for standing, but lengthen it for prone. This you can only do with a fully adjustable buttplate, and is reasonably practical. Adjustable combs are difficult to make, to say the least. About the best way to take care of the height problem here is to adopt the system some nameless Texan thought up years ago for bull-guns: get a strip of sheepskin, preferably of "shearling" type (unsheared is too soft) about 7 inches wide and maybe 20 inches long-wrap around stock and hold with a couple big rubber bands. Can (Continued on Page Sixteen)

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Wanted: Information concerning identity of the shooter who left a Jarco stop watch initialed WDO with me at a Forbes tournament. Dermot Reilly, 445 Western Ave., Albany.

FLYSPECK CHAMPIONSHIP

The fifth annual Flyspeck Championship, a postal prone match at 50 feet on the "flyspeck" target, will be fired during the first three months of 1957. Al Delaney, the originator of the match, will again operate it.

There is a 50 shot individual match and a two-man team match, 25 shots for each shooter. This year, for the first time, there will be an aggregate for the scores fired in the individual and the twoman team match.

This match, fired with .22 cal. rim fire rifles with scope sights, is a real test of fine equipment plus shooter skill and endurance (the 50 or 25 shots have to be fired in that number of minutes, including fouling and sighting shots).

If you are not on the mailing list for this match, address your inquiry to: Al Delaney, Hampden Road, North Somers, Conn. You'll find real competition in this match and good cash prizes are well distributed.

Tournament Circuit (Continued from Page Six)

High shooters in the senior division were John A. Holle 399, Wm. F. Howering 399, Frank F. Briggs 399, Winnifred

A. Carr 398, all from the Roseland Club, and Arthur Burton 398, Somerset.

Five of the six high scores in the junior division were fired by Camp Kittatinny shooters—13 year old Ronnie Brandt scoring 200-15, 13 yr. old Ted Brandt scoring 200-15, 13 yr. old 1ed Paige 200-13, 16 yr. old John H. King 199-14, 14 yr. old Rudy Brandt 199-13, 12 yr. old Ricky Lunn 199-9, and 18 yr. old E. Huttle, Elizabeth PAL scored 199-9. Youngest shooter was 10 yr. old Bill Mills of Glen Ridge.

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CALIFORNIA GIRLS DOMINATE MATCH

With 26 shooting in the all-junior tournament at Brea, Calif., Oct. 28, the girls ganged up to win all three scheduled events. For the 100 meter any sights match, 13 yr. old Kristin Stal made the win with a 400-30x score and Dixie Lange was runner-up with 399-27, an X better than State Champ Jimmy Williams. Eighteen year old Judy Regan made the win of the 100 meter iron sight match with a 399-25, while Jimmy Williams played second fiddle to the tune of 398-27. For the two-man team match at 50 meters, fired in a cold rain, Dixie Lange

and Pauline Speck teamed up to make the female supremacy complete with their winning 798 score, beating Jimmy Williams and Charles Long by a single point.

Is precision shooting expensive? Depends on how you look at it. I consider what is spent on shooting, by one who likes to shoot, a very sound "in-vestment" in healthy recreation and contentment. If you are absorbed in something you like to do you sure are not going to be worrying about things that will probably never happen anyway.

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The Shop

(Continued from Page Fourteen)

regulate height by number of layers you arrange under cheek. On the pistol grip you got to make up your mind as to what permanent alterations you can live with next year . . . it doesn't hurt to cut clearance for thumb across small of stock, or to relieve side for heel of hand, but go slow on altering angles or cutting finger-grooves. Use of plastic wood on exterior of grip allows considerable leeway in trying out personal ideas, yet it can be removed later and stock restored to original shape easily.

Galleries come in different flavors, too. Lighting is usually the main difference . . . 10% are good, 20% fair, and the rest—ugh! With scopes it doesn't matter too much, but with iron sights on some ranges you spend half your shooting time looking for the right bull, when the rifle should be at rest while you rest. Any rifle begins to feel wrong under such conditions. The most common gallery fault is variation in height of target . . some ranges you shoot at targets same height for all four positions. And it ain't comfortable to point uphill prone, or downhill standing . . . such ranges necessitate cramped positions which can be held only for short periods of time. Many a shooter is a hot rock on his home range and gets lost when he leaves home and finds he has to change his positions. Adjustable buttplates help a lot, but uniform requirements on range facilities would help more, maybe! Best way to get in training for the gallery season is to spend a full hour dry-firing in assorted positions on the living-room floor about three nights a week.





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